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The Impact of SARS in Hong Kong:
Implications for the Hotel Industry
in the Wake of the Coronavirus Pandemic

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Abstract

Throughout the years, crises of different nature affected the hotel industry. Disease outbreaks are an example of these type of events that have a potential devastating impact due their complexity. In 2003, the SARS outbreak affected several locations in the world and had tremendous consequences for the tourism and hotel industry, especially as hotels did not have adequate strategies in place to mitigate the impact. With the surge of the coronavirus pandemic, whose impact is noticeably more serious than that of SARS, the hotel industry is suffering even more. Past studies focused on different health crises situations and their impact in the hotel industry, but none has targeted pandemics. It is thus fundamental that hotels learn from previous situations and understand which issues to address when designing crises management strategies. This study aims to answer the following research questions: First, in order to manage the consequences of the coronavirus pandemic in the hotel industry, what can hoteliers learn from the impact of SARS and strategies used to overcome it by hotels in Hong Kong?; second, what can these past lessons teach hoteliers in order to be better prepared for future similar situations?. To answer these questions, this study was built on the impact of the SARS outbreak in the hotel industry in Hong Kong by examining the relationship between key performance indicators, together with an analysis of different studies covering the consequences and strategies used by hotels in this area. Our results uncover a considerable impact in the hotel industry. The main strategies used to overcome the consequences of this crisis focused on staff management, guaranteeing health safety, ensuring the standards of service, securing hotels' image and reputation, ensuring efficient external communication, exploiting lower occupancy levels, increasing demand, and managing the decrease in revenue through cost control measures and potential new revenue streams. It is recommended that hotels address these points but build on the impact of coronavirus in order to be prepared for a future similar situation.

Keywords:

Hotel Industry, Implications, Disease Outbreaks, Coronavirus, SARS

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Introduction

Throughout the years, there were several crises that negatively affected the hotel industry. Although all types are capable of disrupting the sector, disease outbreaks are regarded as being particularly impactful thanks to its potential chaotic implications and difficulties to contain them (Tew et al. 2008).

Currently, the world is facing an unprecedented health emergency with the coronavirus pandemic. The disease, named Covid-19, had its outbreak in December 2019, in the Wuhan Province of China, and as of May 21st of 2020 had already infected more than 5 million people worldwide and accounted for 331,500 deaths (WHO 2020).

This situation is causing disturbances in the majority of industries worldwide, specially impacting tourism and hotels (Wilder-Smith, Chiew and Lee 2020). Similarly, in 2003, the until then unheard-of Severe Acute Respiratory Syndrome (SARS) epidemic triggered a crisis in this sector and, consequently, caused devastating outcomes for hotels (Mao, Ding and Lee 2010; Pine and McKercher 2004; Kim, Chun and Lee 2005).

Despite its similarities with SARS, the differences in the dimension of the impact are already apparent. This is mainly due to the geographical exposure of the disease. While SARS affected 29 countries, mainly concentrating in East Asia (WHO 2003), Covid-19 already affected 187 countries worldwide (WHO 2020). Furthermore, the novel coronavirus substantially drove down air travels (Wilder-Smith, Chiew and Lee 2020) and travel bans between several countries were implemented (CDC 2020), which deeply affected international tourism demand. According to the World Tourism Organization (2020), this value already dropped 22 percent and could plunge anywhere between 60 and 80 percent throughout the whole year. Hence, due to its potential devastating impact to the hotel industry, it is fundamental that hotels gain an in-dept understanding on how to mitigate the negative consequences.

While there is previous research on the relationship of health crises with the hotel industry, namely disease outbreaks and epidemics, none focused on pandemics. Hugo and Miller (2017) studied the impact of zika virus on destination image. Ritchie et al. (2004) examined crisis communication strategies and recovery lessons for the tourism industry based on the impact of the 2001 Foot and Mouth Disease outbreak in the United Kingdom. Hung et al. (2018) analyzed the role of the hotel industry in the response to the H1N1 swine flu epidemic in Hong Kong. Shi and Li (2017) measured the impact of the Middle Eastern Respiratory Syndrome (MERS) outbreak in South Korea inbound tourism. These situations have distinct levels of impact according to their characteristics: disease outbreaks are characterized for impacting a single region, whereas epidemics spread considerably faster thus affecting several locations. Conversely, pandemics are defined as “a type of epidemic, one with greater range and coverage, that occurs over a wide geographic area and affects an exceptionally high proportion of the population” (Merriam-Webster 2020).

As crises of this nature are reportedly a growing concern (Tew et al. 2008), it is important to build on previous work and expand knowledge of this phenomenon. Considering that a disease outbreak with this dimension is a fair recent issue in the contemporary world, there is no research regarding crises management approaches for hotels under these circumstances. However, in order to sustain the repercussions, overcome the impact and be better prepared for a future similar situation, the sector needs to implement efficient strategies.

Hence, this paper seeks to broaden the understanding of the impact of SARS in Hong Kong and the strategies used to overcome this situation by hotels in this area. This region is excellent to use as benchmark, considering it was one of the most affected locations that recovered extremely fast and effectively, consequently ensuring the development of the tourism and hotel industry. Based on this information, our study attempts to compile implications for the strategies designed by hoteliers in order to manage and overcome the

impact of the coronavirus, and also be better prepared for the eventually of a future similar event.

The study thus proposes the following research questions: “In order to manage the consequences of the coronavirus pandemic in the hotel industry, what can hoteliers learn from the impact of SARS and strategies used to overcome it by hotels in Hong Kong” and “What can these past lessons teach hoteliers in order to be better prepared for future similar situations?”.

Literature review

Description of crises

At present, there are a considerable amount of publications on the concept of crises. These often address its causes, definitions, lifecycle and potential consequences. These events can differ on the length of impact and level of development (Hugo and Miller 2017; Martens, Feldesz and Merten 2016). According to Parsons (as cited in Hugo and Miller 2017; Ritchie 2004), crises are divided into three types: *immediate crisis* when it is unforeseeable and thus companies are incapable of drawing preventive measures; *emerging crisis* when they gradually appear and institutions have more time to prepare for its upcoming impact; and *sustained crisis* that are recognized for its prolonged existence. Conversely, Martens, Feldesz and Merten (2016), proposed their categorization in *potential* when there is a possibility of occurrence; *latent* when the events are yet to negatively impact an organization; and *acute* when these repercussions can be measured.

Regardless of the growing body of literature surrounding these events, there is still no consensus among scholars on its definition. Faulkner (2001) defended that crises and disasters arise from a variety of causes and that these have the undoubtful capacity to influence industries and companies on various levels. In his overview, there was no distinction between the two situations. Conversely, Tew et al. (2008) offered a distinct opinion and addressed the

differences between crises and disasters. The authors suggested that crises emerge from unforeseeable leadership failure, whereas disasters come from unexpected phenomena that are beyond organizations' control and, thus can only be addressed upon happening. Renee and Johns (2015) challenged this definition of crisis claiming that it is rather limiting, since it neglects the dimension of the impact of certain external factors like prolonged social tension, active terrorism episodes, disease outbreaks and global recessions. The authors stated that, regardless of pre-implemented preventive measures in organizations, its consequences are often far too great to be contained.

In order to better understand crises, past studies characterized the different phases of a crisis' lifecycle, though most are mere modifications of the most widely acknowledged framework which comprises three steps: *pre-crisis* which comprehends the planning and prevention; the *crisis stage* which calls for a reaction; and the *post-crisis stage* where knowledge is acquired and recovery starts (Mikušová and Horváthová 2019; Ritchie 2004). Conversely, Tanana, Rodriguez and Gil (2019) defended that there is an incoherent inclination to admit different periods of disaster. The authors stated that it is crucial to comprehend that "a disaster does not respond to a cyclical behavior, but rather it is a continuum", since from the moment a stage has passed, it cannot be reverted to its initial state. However, their observation has not received general acceptance, with several authors presenting distinct phases to a crisis lifecycle, all based on the previously described framework (Faulkner 2001; Tew et al. 2008).

Nonetheless, it is commonly accepted that these situations have the ability to deeply impact a country's overall economy and, consequently, its economic sectors and businesses within it (Wang 2009; Renee and Johns 2015; Tanana, Rodriguez and Gil 2019; Prideaux, Laws and Faulkner 2003).

Crisis management

Though there are several crisis management definitions, Mikušová and Horváthová (2019) thoroughly described it as “a process by which an institution deals with a disruptive and unexpected event that threatens to harm the organization, its stakeholders or the general public”. Moreover, various models and perspectives of crisis management have been proposed in literature studies. Generically, these frameworks present the following steps: “*crisis disaster prevention and planning; strategic implementation; and resolution, evaluation and feedback*” (Ritchie 2004; Mikušová and Horváthová 2019).

Scholars recognized that it is extremely challenging to create a flawless strategy due to “the chaotic nature of crises and disasters and the uncertainty that surrounds them”, adding that these are highly complex thanks to “time pressure constraints, limited control and high uncertainty” (Ritchie 2004). Nonetheless, it is commonly agreed that the key determinant factor in successful crisis management is to identify a crisis in time, along with applying an effective action plan to reduce the negative consequences and exploit the opportunities that may arise from the situation (Ritchie 2004; Kim, Chun and Lee 2005; Tew et al. 2008).

It is essential to acknowledge that each situation is unique and there is no perfect framework that would allow any company to resolve all crises thus it is important to create fluid guidelines, rather than having fixed steps that need to be strictly followed (Tew et al. 2008). Recognizing potential risks should also be one of the first steps when drawing an effective plan in order to create a framework that effectively addresses responsive strategies so the impacts can be minimized (Kim, Chun and Lee 2005), while distinguishing between short, medium and long-term plans for the effective allocation of resources (Renee and Johns 2015). In addition, pre-crisis management guidelines should be included. However, it is important to note that companies are not able to fully avoid these situations thus preventive strategies can only alleviate the negative repercussions (Faulkner 2001; Kim, Chun and Lee 2005). Furthermore, recognizing the limitations of the various approaches is fundamental

(Faulkner 2001), as well as, exploiting knowledge of previous crises to avoid unsuitable capital expenditures throughout the process (Tew et al. 2008) and acquire knowledge to further improve existent guidelines accordingly (Faulkner 2001; Tew et al. 2008).

Therefore, it is crucial that institutions fully understand all these perspectives when developing their crisis management strategies so they can allocate energy and resources efficiently, mitigate the negative impacts, fasten the recovery process and scheme preventive approaches for potential upcoming situations.

Crises and crises management in the tourism and hotel industry

Ritchie (2004) believed that globalization pushed the tourism industry and its companies to a rather quick development for the purpose of keeping their competitiveness and profitability. Yet, this made them more vulnerable and exposed to a wider and more complex set of risks, which became increasingly difficult for business owners to address altogether in a flawless way. As a result, in recent years, tourism and hospitality crises management strategies have attracted considerable attention due to the growing knowledge on the increasing predisposition of the sector towards crises (Lo, Cheung and Law 2006; Kim, Chun and Lee 2005; Wen, Huimin and Kavanaugh 2005; Ritchie 2004).

In particular, externally influenced crises are regarded as major disruptors for the hospitality industry, since they affect the destination as a whole rather than a specific hotel chain or property, thus making it more challenging to control and with high potential to bring devastating consequences to the overall industry (Wang 2009). These situations often concern the overall repercussions in demand fluctuation which affect the macro-economic environment of the tourism industry and, consequently, impact the hotel sector (Tanana, Rodriguez and Gil 2019; Shaluf and Ahmadun 2006). Additionally, these events have the capacity to negatively affect the destination's image and consequent people's perception of it; which has been identified as a determinant factor for tourists' destination choice; thus,

preventing the tourism sector in that region to sustainably grow and thrive (Tanana, Rodriguez and Gil 2019).

Several authors acknowledged that these factors create a reduction in hotel's reservations and a rise in cancellations, which originates a decline in revenue and a rise in extra future costs in an attempt to reestablish hotel's operations and reputation (Kim, Chun and Lee 2005; Mao, Ding and Lee 2010, Ritchie et al. 2004). In fact, even after a crisis is completely resolved, hotels can still continue to suffer the aftermaths for a considerable amount of time, considering that the destination's image may be damaged temporarily (Ritchie et al. 2004). Hence, it is important that the sector gains intelligence regarding the risks and potential impact associated with these unexpected externalities so they can be addressed effectively, without compromising tourism demand in the long-term.

Scholars frequently describe these unforeseen events as terrorism, natural disasters, economic crises, political tensions, social conflicts, war and contagious outbreaks (Kim, Chun and Lee 2005; Wang 2009; Hugo and Miller 2017; Tanana, Rodriguez and Gil 2019). It has been widely tested in literature how the probability and nature of these events have a direct impact in international tourism demand and thus in the overall industry and hotel sector. Furthermore, due to the increasing global connectivity (Ritchie 2004), these crises are able to indirectly implicate other tourist destinations, without occurring on the country's territory (Wang 2009).

Many authors defended that it is crucial to learn from past situations and put in place crises management approaches so future issues arising from these externalities can be effectively contained and their negative consequences reduced. It is also commonly agreed that the absence of strategies to these situations can create overwhelming consequences (Mao, Ding and Lee 2010; Ritchie et al. 2004). Additionally, scholars stated that present unforeseeable crises that impact the tourism industry can be used as a way of updating existing frameworks

and serve as a learning platform in order to prevent bigger future damages in the upcoming ones (Wang 2009; Kim, Chun and Lee 2005). Therefore, it is imperative to understand the extent of these various external challenges, so preventive strategies and proactive responses can be created, updated and implemented by hotels.

A large amount of empirical studies examined crises in the tourism and hotel industry from an economic perspective using conventional approaches like regression analysis (Mao, Ding and Lee 2010). The relationship between macroeconomic variables and tourism has also been debated (Wang 2009). Although these methods are able to examine data and showcase the level of impact of disasters, they often lack the understanding of how the negative consequences could have been mitigated. Hence, these methods are not suited for the formulation of approaches on how to identify, prevent and reduce the impact of risks and threats.

The majority of literature that examined crises management within the hotel industry only tried to identify the magnitude of the negative consequences, create approaches to return hotels to its normal state and scheme preventive operational strategies, thus lacking the perspective on the potential positive outcomes and opportunities for true business innovation. Also, when using previous crises as examples, authors tended to address potential future ones with the same level of impact thus creating an inadequate crisis management approach that could turn out as insufficient and prone to failure. Therefore, it is crucial that hoteliers have access to insights that allow them to create innovative preventive and recovery strategies, considering various scenarios on the potential dimension of impact of different crises, thus ensuring success when crises arise.

SARS

In November 2002, the first case of Severe Acute Respiratory Syndrome, caused by the SARS-CoV virus, was reported in the Guangdong Province of China (CDC 2003). At that

time, the situation was unprecedented and there was limited knowledge on the modes and probability of transmission, which made it more challenging to control (Tew et al. 2008). In total, there were 8,096 reported cases worldwide, and 744 people lost their lives to the disease (CDC 2003). There was a total of 29 affected countries in Asia, Europe, North and South America (CDC 2003), however the most affected regions were Beijing, several provinces of Mainland China, Hong Kong, Taiwan and Toronto (WHO 2003).

The outbreak lasted until July 2003 (CDC 2003), causing severe disruptions to several hotels in different countries. It was reported that the outbreak affected the global tourism industry five times more than the 9/11 attacks, representing a greater decrease in the number of international tourists (Wang 2009). Tourism demand was deeply impacted due to greater fear regarding health safety while travelling, which consequently impacted hotels' overall revenue and investments (Lo, Cheung and Law 2006; Pine and McKercher 2004).

Nonetheless, it was reported in literature how drastic revenue losses also occurred as a result of the lack of preparation from the tourism sector, specially hotels (Tew et al. 2008). Authors observed that even after the situation was fully resolved, hotels continued to endure the consequences. Destinations that were not directly affected by the disease, also suffered a detrimental impact in its tourism and hotel industry (Kim, Chun and Lee 2005).

There are a few studies that addressed the consequences of SARS in the hotel industry, however most of them focused on the impact rather than developing the needed recovery measures to overcome this issue. This is likely due to the short period of the outbreak which did not allow scholars to create responsive strategies for this crisis in particular, nonetheless there are a few studies developed pos-crisis that tackled the strategies used by hotels. These comprise schemes created by hoteliers on how they dealt with the impact of SARS and guidelines to approach potential future similar crises (Kim, Chun and Lee 2005; Tew et al. 2008). However, these implications focused on temporary measures that are needed when

crises arise, missing out the opportunity for true innovation and neglecting the possibility of an extremely prolonged crisis that ceases all tourism demand on a global scale. Furthermore, few studies emphasized on the recovery patterns of the industry pos-SARS, which are also fundamental when addressing future recovery strategies, yet these only considered countries that suffered a direct impact from the disease (Mao, Ding and Lee 2010).

With the emergence and growing impact of Covid-19, and with precedents like SARS in 2003 and MERS in 2012, it is commonly acknowledged that the discussion on the occurrence of disease outbreaks is not a matter of “if” but rather of “when” (Jamal and Budke 2020). Though the hotel industry is not able to fully prevent these types of external crises from impacting its properties (Ritchie et al. 2004), it is fundamental to have pre, during and post-crises management strategies in place when fighting these unforeseeable events. Hence, hoteliers need to examine previous examples and develop efficient guidelines that will allow them to overcome the impacts of the current pandemic and also be prepared for the eventuality of future ones.

Methodology

This paper assesses the impact and strategies used to manage the consequences of the SARS outbreak in the hotel industry in Hong Kong by examining the relationship between key performance indicators and through the analysis of different studies that covered the topic. This allowed to comprehend how the hotel industry in Hong Kong was affected and responded during SARS, so these insights could be used to benchmark implications for a strategic crisis management approach for the current coronavirus pandemic. In order to benchmark, it was important to choose a region that was extremely affected yet it was able to recover fast and successfully, hence Hong Kong was selected as a regional scope for complying with these requirements. The results and consequent analysis were divided into two parts.

For the first part, datasets on the number of *international tourist arrivals*, hotel *occupancy rate*, *Average Daily Rate (ADR)* and *Revenue Per Available Room (RevPAR)* were selected in order to examine and compare hotels' performance before, during and after the outbreak. International tourist arrivals are the most common variable when trying to measure tourism demand. This value comprises overnight tourists, who spend more than one night in the country they are visiting, and same-day visitors who do not stay overnight (Eurostat 2014). Together, they account for the total number of visitors of a country. Regarding the tourism variables, the occupancy rate refers to "the ratio of rented or used space to the total amount of available space" and ADR suggests "the average revenue earned for an occupied room on a given day (Investopedia 2020). When these two values are multiplied, they convert into the revenue per available room (RevPAR), which is used to "assess a property's ability to fill its available rooms at an average rate" thus allowing hotels to evaluate the success of room sales (Investopedia 2020).

This data was collected from CEIC Data, whose database on the subject comes directly from the Hong Kong Tourism Board (HKTb). In general, the Hong Kong government is considered to be a credible source of information (Wondirad and Agyeiwaah 2016), which made it an excellent resource of quantitative secondary data. This information was analyzed using the method of cross-tabulation, which is commonly used for a straightforward interpretation on the relationship between multiple quantitative variables (White 2004), and then arranged in graphs to provide a visual interpretation of that data. Furthermore, the comparison between these key performance indicators was presented chronologically in order to fully understand during which phase of the crisis these variables were affected. If there is knowledge regarding that situation, the correct allocation of efforts during different stages can be made more effectively.

The second part consisted on an analysis of existing literature that covered the impact and specific measures implemented by hotels in Hong Kong in order to overcome the impact of SARS (*see appendix 1, p. 30*) Some of these studies included interviews with hoteliers in the region in order to gather the strategies utilized by hotels, whereas others used document analysis and applied research techniques for the purpose of getting qualitative information regarding the impact. This specific examination technique of qualitative secondary data is defined as *supra analysis*, since it is used when “the aim and focus of the secondary study transcends those of the original research” (Heaton 2008). Consequently, the findings were organized and presented in different themes. In order to validate and increase the credibility of these findings, the gathered strategies were triangulated with other similar studies regarding different countries that were also affected by SARS, namely Canada, Singapore and South Korea (*see appendix 2, p. 30*).

Based on this information, an elaboration of implications was designed for hoteliers so they can create effective responsive strategies in the wake of the coronavirus pandemic, and further develop preventive measures for the eventuality of a future crisis with similar characteristics.

Results

Hotel key performance indicators (KPIs) analysis: Hong Kong during SARS

Due to the undoubtful relationship between tourism performance and hotels’ success (Renee and Johns 2015; Faulkner 2001; Ritchie 2004), it is fundamental to acknowledge the development and potential negative effect of this type of crisis in tourism key performance indicators in order to better comprehend the impact in hotels. Key performance indicators (KPIs) relate to “a set of quantifiable measurements used to gauge a company’s overall long-term performance” (Investopedia 2019). These are crucial to establish a firm’s “strategic, financial, and operational achievements” (Investopedia 2019). Hence, tourism and hotel KPIs of before, during and after the SARS crisis in Hong Kong were examined so hoteliers can understand the impact behavior of such crisis.

It is important to underline that tourism demand and these specific variables are not exclusively impacted by one factor at a time, but rather from a complex and interconnected system of variables such as income per capita of visiting countries, currency rates, inflation, investments, among others (Khandaker and Islam 2017; de Sausmarez 2007). However, for the purpose of this study, the tourism variable examined is *international tourist arrivals*, which was compared with three hotel KPIs: *occupancy*, *average daily rate (ADR)* and *revenue per available room (RevPAR)*. These four factors are intrinsically related in the sense that if there are less international tourist arrivals, occupancy goes down, which forces hotels to lower the ADR in order to increase demand and, consequently, hotel RevPAR also declines (Ritchie 2004). Since hotel's main revenue stream comes from accommodation, if RevPAR decreases significantly, it signifies that the overall revenue of the hotel is suffering considerably (Khandaker and Islam 2017; de Sausmarez 2007). Also, the analysis of these KPIs is necessary for hotels to address a diversified array of decisions such as employee scheduling, hotel services planning, revenue management, marketing strategies and forecasting (de Sausmarez 2007; Wang 2009).

Since the peak of SARS was between April and June of 2003 (WHO 2003), values between 2001 and 2002 were taken into account to create a baseline for the state of the industry prior to the crisis and from 2004 to 2006 to understand the recovery levels. The table below represents the number of international arrivals in the region, hotels average occupancy percentage, and ADR and RevPAR in Hong Kong dollars, from 2001 to 2006.

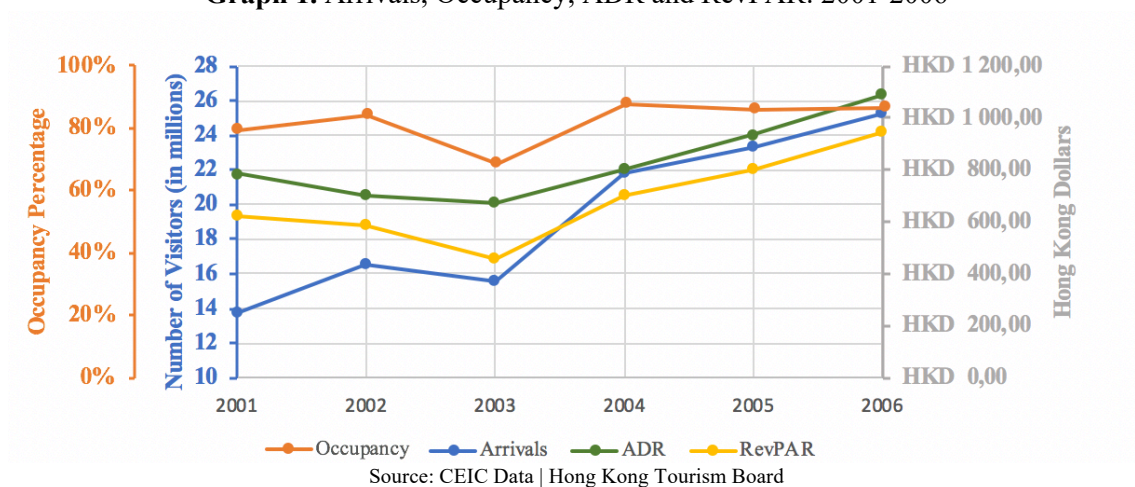
Table 1. Arrivals, Occupancy, ADR and RevPAR: 2001-2006

	Arrivals	Occupancy	ADR	RevPAR
2001	13 725 332	79%	HKD 784,00	HKD 620,67
2002	16 566 382	84%	HKD 700,00	HKD 589,17
2003	15 536 839	69%	HKD 670,00	HKD 459,51
2004	21 810 550	88%	HKD 801,00	HKD 704,21
2005	23 359 417	86%	HKD 935,00	HKD 802,54
2006	25 251 124	87%	HKD 1 090,00	HKD 943,76

Source: CEIC Data | Hong Kong Tourism Board

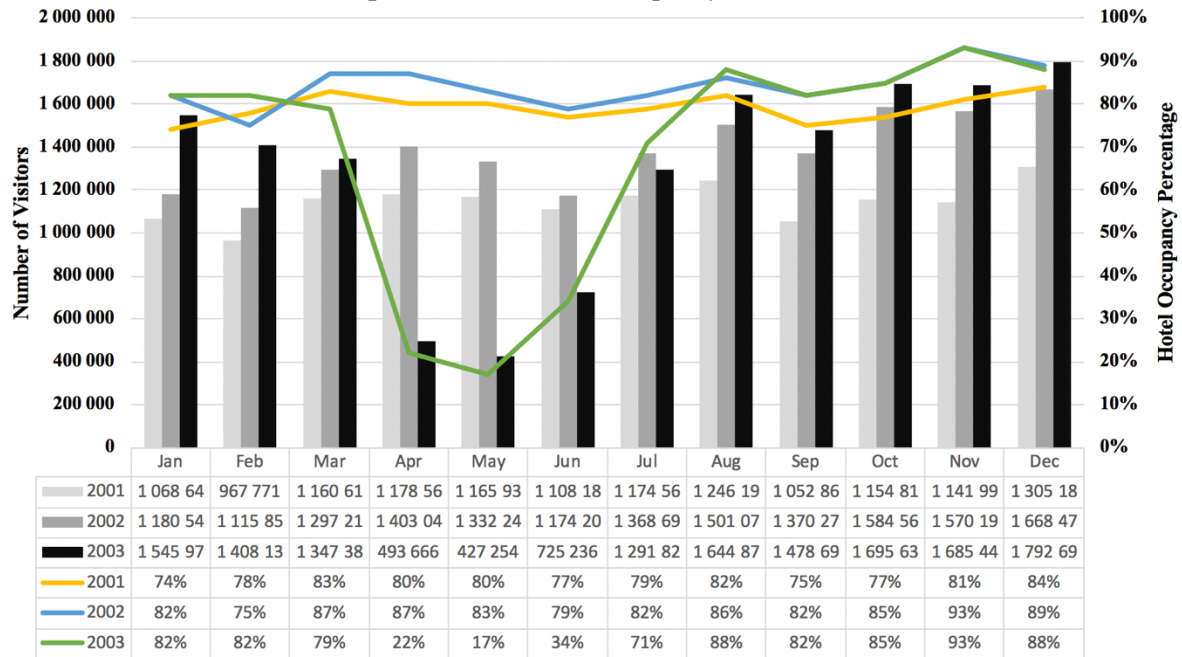
From 2001 to 2002, there was an increase of 2,841,050 tourist arrivals in Hong Kong, which resulted in the increase of the average occupancy by five percentage points. Despite the fact that the occupancy rate dropped to 69 percent in 2003, the number of overall arrivals was only inferior by 1,029,543. ADR and RevPAR also dropped by HK\$30 and HK\$129.66, respectively. In 2004, the number of arrivals, percentage, ADR and RevPAR presented even higher values than the ones recorded previous to SARS. These continued to improve until 2006, with total arrivals reaching above 25 million, hotels' occupancy averaging 87 percent, ADR above HK\$1,000 and RevPAR close to HK\$950, thus representing a full recovery from this crisis and further development of the sector. The graph below shows the shape of these values, making it evident that all these variables were considerably lower in 2003 compared to 2002 and showed recovery levels by 2004.

Graph 1. Arrivals, Occupancy, ADR and RevPAR: 2001-2006



However, if monthly arrivals and occupancy values are compared between 2001 and 2003, the impact of SARS in the overall hotel occupancy becomes visibly more apparent. As shown in the graph below, these values suffered a severe impact during the most critical months of the outbreak (April to June), displaying evidence of the continuous impact even after the situation was resolved (July), ultimately recovering from August onward.

Graph 2. Arrivals and Occupancy: 2001-2003



Source: CEIC Data | Hong Kong Tourism Board

By looking at the values, the difference in arrivals and hotel occupancy percentage during the most critical months of SARS (April to June) becomes more evident. In April, tourist arrivals were down by 909,375 and occupancy dropped 65 percentage points compared to the previous year. In May, international arrivals continued to go down, only reaching 427,254 and the average occupancy recorded from all hotels dropped below 20 percent. In June, numbers started to pick up, with a smaller difference from previous years. Regardless, tourist arrivals were still below one million and occupancy was down by 45 percentage points compared to 2002. In July, arrivals were back to standard values, and occupancy started presenting a considerably lower difference with the previous years, only diverging by eleven percentage points from 2002. By August, occupancy rates were already recording higher numbers than its precedents, with 1,644,878 total arrivals and hotels recording an average occupancy of 88 percent.

These variables are representative of the impact and the possibility of recovery for the hotel industry regarding a crisis of this nature. Regardless, it is fundamental to understand the type of strategies utilized that guaranteed the successful recovery. Hence, the following section is

composed by a summary of the impact of SARS and response strategies reported by hotels in Hong Kong.

Summary of the impact of SARS and response strategies used by hotels in Hong Kong

The examination of the studies allowed to conclude that the majority of interviewed properties indicated that the impact in tourism demand was immediately felt from the moment the World Health Organization issued travel warnings to the region on the 2nd of April of 2003 (WHO 2003). As a consequence, the average occupancy rate fell drastically from April to June, and room rates were cut down between five and 35 percent. Additionally, the hotels reported that despite the fact that SARS was solely an active concern in the area during these months, the impact was prolonged and felt even after the situation was resolved. However, once WHO removed the travel warning against Hong Kong on May 23rd (WHO 2003), average room rates were able to get back to usual numbers since occupancy started slowly rising, yet it was considerably lower compared to previous years. These findings appear to be well substantiated by the values released by the Hong Kong Tourism Board presented in the previous analysis of the key performance indicators thus strengthening the credibility of these results.

Additionally, it was determined that accommodation was not the only department of the hotel that was affected, since food and beverage outlets were almost empty, and some even had to close down. Moreover, conferences and events were cancelled further affecting the hotels' revenue.

The most striking piece of information found was that the majority of hotels lacked crises management approaches, and the ones who had them were proven to be inadequate for this situation. In fact, all existent guidelines were directed at emergency events like fires and bomb threats. Therefore, the only crises being acknowledged were the ones with generally short duration and not a prolonged one like the SARS epidemic.

Furthermore, it was reported that most hotels had a pre-determined team composed by upper management that would undertake specific actions in case of disaster. However, the majority of interviewed members asserted their hesitance on guiding their teams due to the nature of this crisis, the insufficient knowledge they had about it and the uncertainty surrounding it.

Upon analyzing the findings collected from these studies, the main strategies used to manage and reduce the negative impact of SARS by hotels in Hong Kong were identified: staff management; guarantee health safety; ensure the standards of service; secure hotels' image and reputation; efficient external communication; exploit lower occupancy levels; increase demand; and manage the decrease in revenue through cost control measures and potential new revenue streams. Although there were several strategies within these sections that overlapped, others were only capable of being undertaken considering each property's specific capabilities. Therefore, although all hotels focused on the same goals, they committed to different actions to achieve them based on their competencies and financial resources. These findings matched the results from other studies regarding the strategies used to overcome the impact of SARS in Canada, Singapore and South Korea hotels.

In order to guarantee guests and employees' health protection, there was an increase in the frequency of sanitation of all areas, especially public ones. Hotels also focused on improving health security measures targeted at both guests and staff, emphasizing on the importance of employees' awareness regarding preventive equipment and good hygienic practices. In order to do so, staff went through educational programs, trainings and daily briefings on the situation, which allowed an effective flow of communication between managers and employees. This information was enriched from close communications with the government and health entities that shared valuable information regarding the status of the situation and other special measures that needed to be considered at that time.

The public relations and communication department also had to ensure hotels' image and reputation during this time so its relationship with corporate accounts, repeated guests and potential new clients would not get permanently damaged. However, as a means to increase demand, the sales and marketing department also conducted aggressive advertising and put together temporary special offers and room rates based on their information and other that came from airline companies, travel agents and other hospitality businesses.

Due to the swift decrease in revenue caused by the decline in demand, hotels took on cost control measures regarding their operations by, for instance, reducing the number of elevators or other machinery that was not needed at the time due to the lower occupancy. They also cut costs on human resources level; however, it was reported that hotels that adopted substantial dismissal actions and reduction of salaries and benefits, suffered a major disruption in employee morale which affected staff's performance.

Properties also had to ensure revenue and cash flow, so it was crucial to temporarily find new markets and expand revenue streams according to the properties' capabilities. Some of these examples were the proposal of cleaning services for corporate accounts, while others allowed them to use rooms as temporary offices. Nevertheless, one of the most successful strategies was focusing on the potential of domestic tourism, since international tourism demand was extremely low. Hence, hotels started offering special accommodation and food and beverage packages for these guests and, consequently, they noticed that properties that offered these deals started having stronger occupancy rates.

Certain hotels with higher financial capabilities took advantage of the lower occupancy to undertake renovation projects and carry out other types of trainings in order to elevate the standards of service. If the occupancy was higher, these actions would disrupt the normal hotel operations thus showing how the occurrence of crisis can be exploited for the benefits of hotels.

After the situation was resolved, due to the increased awareness on the significance of having preventive measures in place, hotels created special teams composed by different managers in order to create a crises management team that was qualified to deal with such situations. Moreover, higher standards of hygiene and health security were kept as regular procedures.

With the implementation of these strategies, occupancy levels were reported to reach closer values to their normal numbers in July of the same year, which matches the recovery recorded by the Hong Kong Tourism Board. In 2004, the Hong Kong hotel industry presented even higher values compared to the ones previous to SARS, which shows the efficient rehabilitation and further growing of the sector.

Nevertheless, it is worth noting that the development of the hotel industry amid such crisis relies on a complex variety of determinant factors that include the properties, the industry and the government's efforts collectively (Renee and Johns 2015). In fact, if cross-checked with other regions like Toronto, Singapore and South Korea, the number of arrivals in the three countries started rising once WHO lifted all travel advisories (Henderson and Ng 2004; Kim, Chun and Lee 2005; Tew et al. 2008), which strengthens the hypothesis that this factor is likely to affect tourism demand under these circumstances. Hotels also stated that regardless of having preventive measures in place, the impact of these situations cannot be completely eliminated but rather mitigated. Similarly, this notion has been widely accepted in higher literature (Tew et al. 2008; Shaluf and Ahmadun 2006). Therefore, it can be inferred that the success of hotels upon crisis of this nature does not depend entirely on the effectiveness of operational approaches.

Implications

The main aim of this study focused on addressing the research questions “In order to manage the consequences of the coronavirus pandemic in the hotel industry, what can

hoteliers learn from the impact of SARS and strategies used to overcome it by hotels in Hong Kong” and “What can these past lessons teach hoteliers in order to be better prepared for future similar situations?”.

Much like hotels in Hong Kong were not adequately prepared to deal with such situation for being so unprecedented, it is hypothesized that hotels located in regions that never suffered from crisis of the same nature may also be insufficiently prepared for the impact of the novel coronavirus. Moreover, the substantial difference of the repercussions of both crises, also questions whether locations that were previously affected by epidemics can effectively deal with a pandemic based solely on its current crisis management approaches. Therefore, it is important to acknowledge the major differences between both crises, considering that the impact of Covid-19 is larger and unprecedented within the hotel industry, which may cause its recovery to be slower and lengthier. These dissimilarities were recorded in the table below.

Table 2. Differences between SARS and Covid-19

Legend	SARS	Covid-19
Number of affected countries/Geographical exposure	29; mainly affecting countries in East Asia	As of May 21 st of 2020;187 countries worldwide
Length of impact	Mar 2003 – July 2003	Dec 2019 - Present
World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) travel advisories	Travel advisories issued to 9 locations: Mainland Chinese Provinces; Taiwan; Hong Kong; Toronto, Canada	Travel advisories issued globally on different levels (CDC 2020)
Travel bans	No restrictions of travelling between countries were imposed	Currently, more than 80 countries have imposed travel bans (The Economist 2020)
Recovery length	In August, market-level occupancy was back to usual numbers (STR 2020; CEIC Data 2020)	Currently unknown, but likely to be considerably longer than SARS due to significantly bigger impact

With reference to the characteristics of this pandemic, implications were geared towards during and pos-coronavirus phases, since preventive measures cannot be designed for this crisis anymore. These were created in accordance with the potential impacted factors and the

identified main strategic recovery themes from the previous section. Based on these findings, implications were drawn so hotels can create their own specific crisis management approaches according to the specificities and financial capabilities of their properties. These are presented in the following table.

Table 3. Strategies used to overcome the impact of SARS and implications for Covid-19

SARS	Implications for Covid-19
Staff management	Properly informed upper management to be able to adequately communicate vital information to their teams; Engage staff in the discussion regarding salary cuts; Check on temporary dismissed employees regularly.
Guarantee health safety	Increase frequency of disinfection of all hotel areas; Creation of standard operation procedures (SOPs) ¹ ; Strict guidelines regarding prophylactic hygienic behavior for staff and guests; Provide preventive equipment (e.g. alcohol gel and masks); Health safety trainings; Daily briefings to remind employees of the new implemented measures. ¹ SOPs: step-by-step instructions used in hotels to ensure that staff performs specific duties systematically thus guaranteeing consistency in tasks by avoiding miscommunications and helping with employee training (Luoh, Tsaor and Tang 2014).
Ensure the standards of service	Continue usual staff trainings; Balance the number of missing employees with level of service provided; Develop an adequately trained team of managers that overviews operations.
Secure hotels' image and reputation	Communicate health measures in place; Maintain speed and quality of service; Frequently engage with corporate accounts and repeated guests to ensure these revenue streams are not compromised in the long-term.
External communication	Exchange knowledge with the government and health entities in order to be properly informed on the status of the situation; Use effective platforms to ensure an effective flow of communication with potential guests.
Exploit lower occupancy	Properties with higher financial capabilities should exploit the lower occupancy to engage in hotels' pendant renovations; Carry out special educational programs that will increase the service level in the long-term
Increase demand	Advertising and special sales promotions; Share and receive valuable information from travel airlines, travel agents and other hospitality businesses in order to avoid the incorrect allocation of marketing and sales resources thus maximizing the potential demand.
Cost control measures	Cease redundant expenses; Reduction of salaries or number of employees for departments that are less busy.
New revenue streams	Explore new market opportunities and revenue streams, since traditional channels are not profitable during this situation. While international tourism demand is considerably lower, hotels should focus on domestic demand. If conventional revenue streams are not profitable, others should be implemented temporarily.; Find alternatives for food and beverage, conference and events services like take-away options.

It is fundamental that properties continue the best practices to ensure credibility and innovate their approaches in order to be better prepared for similar future situations. The novel coronavirus outbreak showed hotels how traditionally focused their business models and services are displayed thus showing how they are sensible and prone to risks of this nature. Hence, long term and preventive guidelines for upcoming health crises situations were also developed.

The lessons learned from the coronavirus pandemic should be used to strengthen strategic forecasting, map current and possible future risks, create potential crises scenarios and management approaches, update contingency planning, develop simulation exercises and create strong incorporated emergency plans where both hotels and other valuable institutions like government and health entities are aware and involved. In order to achieve this, strategic teams that are adequately capable of managing situations with these characteristics and dimension should be assembled. All employees need to be involved and frequently trained on the required behavior needed under these circumstances, so strategies can be rapidly implemented when needed and negative impacts can be contained.

As previously mentioned, this unprecedented situation allowed hotels to gain perspective on how current business models have flaws and lack response when crises of this nature occur. Therefore, hotels should thoroughly focus on upgrading traditional revenue streams and follow a business model innovation concept in order to find new potential markets and services thus spreading the risk if a similar event happens in the future. These should include the emphasis on the creation and allocation of personnel in strategic innovation and transformation positions. This will allow properties to differentiate and offer stronger selling points, while business sustainability grows in the long-term and hotels are shielded from similar issues in the future.

Limitations

The methodological choices for obtaining qualitative data were constrained to secondary sources, since the collection of primary data was not possible due to hotels' unavailability at this time. Despite the fact that its use is defended by many scholars in contemporary studies (Johnston 2014), there are two main limitations of this method discussed in literature: *problem of data fit*, namely the issue on “whether data collected for one (primary) purpose can be re-used for another (secondary) purpose”; and *problem of not having been there* which entails the obstacles regarding the analysis of certain data that “was collected by other researchers” (Heaton 2008).

Also, these results are limited to the impact and strategies used by hotels in Hong Kong. Regardless of being cross-checked with other regions, it is crucial to acknowledge that these are not representative of all areas due to differences in the macroeconomic environment and, more specifically, the distinctive characteristics of the tourism and hotel industry of each location. This is also an issue if the context of other health crises differs substantially, which may be the cause with a global pandemic that stretches across significantly different cultures.

It is also beyond scope the quantification of the tremendous difference of the impact of SARS compared to Covid-19, especially regarding the impact in global air travel during the latter, that poses as an additional challenge since hotels are not able to directly control air traffic and travel demand. Furthermore, the distinct dimension of the impact from one to the other is substantial, since the first only impacted certain regions of the world, whereas the latter impacted tourism and the hotel industry worldwide, which potentially raises additional and currently unknown disruptive variables that were not mentioned.

Additionally, the particular tourism key drivers and probability of rehabilitation of each country were not accounted for. As previously mentioned, the recovery of the hotel industry is not based exclusively on the strategies used by hotels since the sector is influenced by a wider variety of external factors, such as the state of the economy, the investments made in

the tourism industry and others (Renee and Johns 2015), that were not accounted for in this study thus presenting an extra limitation.

Directions for future research

This pandemic is involved in several unanswered questions, especially regarding its length and behavior, which makes it a more prolonged and complex situation to tackle compared to SARS. Given its current meaning and undoubtful need to better understand the dimension and management strategies required to overcome the impact of the coronavirus pandemic in the hotel industry, along with the scheming of preventive strategies necessary for future similar situations, the following directions for future research are proposed:

- Utilize different methodologies in order to strengthen these findings, demonstrating the perspectives of hotels and tourists;
- Address the understanding of the current perception of risk by international travelers. There are a few studies regarding this topic, but these were prior to this situation, hence they need to be reevaluated in order to effectively understand tourism demand fluctuations;
- Investigate changes in influential factors of tourists' hotel selection. In the past, these were more directed at different elements such as price-quality, whereas now hotel's cleaning and disinfection activities may be taken more seriously when tourists choose an accommodation. It is crucial to understand guests' new needs and desires in order to add value to hotels and succeed;
- Research the development of synergetic approaches and strategies between government entities and accommodation providers, which are crucial for these situations that are not avoidable or able to be mitigated by single entities;
- Explore future innovation and transformation strategies in the hospitality industry and how these can be used to be better prepared for future crises.

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Appendix

Appendix 1: Studies used for findings regarding the impact and strategies implemented by hotels in Hong Kong during SARS

Academic Publication	Focus
Lo, Cheung and Law 2006	The survival of hotels during disaster: A case study of Hong Kong in 2003
Pine and McKercher 2004	The impact of SARS on Hong Kong's tourism industry
Mao, Ding and Lee 2010	Post-SARS tourist arrival recovery patterns: An analysis based on catastrophe theory
Hung et al. 2018	The role of the hotel industry in the response to emerging epidemics: a case study of SARS in 2003 and H1N1 swine flu in 2009 in Hong Kong

Appendix 2: Studies used to triangulate, validate and increase credibility of information from previous findings

Academic Publication	Focus
Tew et al. 2008	SARS: lessons in strategic planning for hoteliers and destination marketers
Henderson and Ng 2004	Responding to Crisis: Severe Acute Respiratory Syndrome (SARS) and Hotels in Singapore
Kim, Chun and Lee 2005	The effects of SARS on the Korean hotel industry and measures to overcome the crisis: A case study of six Korean five-star hotels